



(12) **United States Patent**
Breit et al.

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(54) **PHYSICAL LAYER METRICS TO SUPPORT
ADAPTIVE STATION-DEPENDENT
CHANNEL STATE INFORMATION
FEEDBACK RATE IN MULTI-USER
COMMUNICATION SYSTEMS**

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H04W 4/00 (2009.01)

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USPC **370/252**; 370/271; 370/329; 370/341;
375/349; 455/69

(58) **Field of Classification Search**
None

See application file for complete search history.

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(57) **ABSTRACT**

Certain aspects of the present disclosure present physical
layer metrics for supporting adaptive station-dependent chan-
nel state information feedback rate in multi-user communi-
cation systems. For certain aspects, the physical layer metrics
may be calculated at the stations and communicated to the AP.
For certain aspects, the metrics may be calculated at an access
point utilizing information about channel characteristics of
stations available at the access point.

43 Claims, 15 Drawing Sheets

